

1.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The first and second conditions are not stated anywhere in the specification. Signals based on temperature and time are described but the conditions and the requirements for fulfilling the conditions are not described anywhere in the originally filed specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since the first condition is not mentioned in the specification it is not known what the first condition is and how it is met.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 6-7, 9-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Walkoe in view of Lile (US 2004/0027248).**

Regarding Claim 6: A method for operating a cooking appliance having a cooking appliance control system (**Circuit and timer control. See Column 2, Lines 20-23**) and a door moveable between a closed position and an open position, the method comprising: (**Fig 2 shows door 7 in a closed position and is movable to an open position. See Column 3, Lines 1-2**) automatically moving the door from the closed position to the open position using the cooking appliance control system in response to a first signal when a cooking process is complete; and (**The door 7 is moved from a closed to open position when the cooking process is complete, when a timer expires or when the food reaches a preselected temperature and sends a current signal to a bimetallic switch. See Column 2, Lines 5-16**)

automatically returning the door from the open position to the closed position when a physical quantity falls below a predetermined threshold value stored in a memory of the cooking appliance control system. (**The appliance is capable of closing the door**

when the temperature stored in its memory falls below a value since the device has all the necessary elements for performing this function. The ram will retract to its original position when the circuit is broken, closing the door. See Column 7, Lines 20-25.)

Regarding Claim 7: A cooking appliance comprising: (Domestic cooking oven. See Column 1, Line 3)

a cooking chamber bounded by a housing; (Electric range 1 comprises a metal body 2 and a cooking cavity 5 with an oven liner 6 making up a cooking chamber bound by a housing. See Column 2, Lines 65-72) a door moveable between a closed position and a predetermined open position; a cooking appliance control system having a memory; (When the thermometer control knob is set the temperature value is stored. The timer 14 also performs a similar function for storing time. Fig 2 shows door 7 in a closed position and is movable to an open position. See Column 3, Lines 1-2)

a sensor disposed in the cooking chamber configured to send an output signal to the cooking appliance control system; (a probe 10 sends a signal to a thermometer circuit. See Column 4, Lines 7-11. A timer switch 14 and thermometer control knob 18 make up the cooking appliance control system. See Column 3, Lines 25-30)

a guide device; and (a push rod frame 48 and a round base cavity 55 act as a guide device. The crank 58 guides the door to an open or closed position. See Column

5, Lines 4, 17, 35 and Figs 3 and 4)

a door opening device including a positioning motor **(the ram actuator 42 is a positioning motor for opening the door. See Column 4, Lines 66-70)** and a rod configured to be automatically reciprocated in the guide device by the cooking appliance control system via the positioning motor **(the ram 47 or rod is moved by the ram actuator or motor in the guide device made of push rod frame 48 and round base cavity 55)** so as to automatically move the door from the closed position to the predetermined open position **(oven door is opened by the actuator. See Column 5, Lines 22-23)** and from the predetermined open position to the closed position, **(The ram returns to its original retracted position closing the oven door. See Column 7, Lines 22-23)** the cooking appliance control system configured to actuate the positioning motor as a function of the output signal so as to automatically move the door from the closed position to the predetermined open position when a cooking process is complete **(The door 7 is moved from a closed to open position when the cooking process is complete, when a timer expires or when the food reaches a preselected temperature. See Column 2, Lines 5-16. Since the door is opened in response to time this is a first condition. The door closing when the circuit is broken by the bimetallic switch is a different second condition.)** and to actuate the positioning motor so as to automatically return the door to the closed position when a physical quantity falls below a predetermined threshold value stored in the memory. **(The appliance is capable of closing the door when the temperature stored in its memory falls below a value since the device has all the necessary elements for**

performing this function. The ram will retract to its original position when the circuit is broken, closing the door. See Column 7, Lines 20-25. The door is not completely closed due to a stopping element. However, all the opening components retract which would allow one of ordinary skill in the art to configure the door to close automatically.)

Walkoe fails to teach:

Regarding Claims 6 and 7: closing the door in response to a second condition wherein the first and second signals are different.

Lile teaches:

Regarding Claims 6 and 7: The door opens or closes based on the amount of voltage applied. **See Paragraph [0021].** Since the voltage is different the opening (first) and closing (second) signals are different. The differing voltages are different conditions since the opening and closing conditions are not the same.

In view of the teachings of Lile it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Walkoe, closing the door in response to a second signal and the first and second signals being different since Lile teaches closing a door in response to a voltage level for closing a door when a process is completed and the opening and closing voltage signals being different for

differentiating between the opening and closing signals to allow for opening or closing depending on which is required.

Furthermore, Walkoe discloses the claimed invention except for automatically closing the door. It would have been obvious to one having ordinary skill in the art at the time the invention was made to automatically close the door, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Walkoe also teaches:

Regarding Claim 9: The cooking appliance wherein the positioning motor includes an electrically heatable shape-memory element. **(The thermometer circuit which controls the operation of the actuator 42 or motor and is part of the motor includes a bimetal strip 24 which is heated by the bimetal strip heater 25. The strip moves when heated to connect with contact 26. The strip will move and disconnect when the heat is not applied. This strip is a heatable shape-memory element. See Column 4, Lines 11-17. Also, a temperature sensitive material is located in the heating element 66 which increases or decrease in volume depending on the temperature controls the activation of the ram actuator. The material is heated and changes from a solid to liquid state axially displacing the**

ram. When the material solidifies it contracts and allows the ram to retract. See Column 5, Line 5 - Column 6, Line 7.) The applicant also discloses a shape memory element device capable of opening an oven door which can be used for opening and closing a device. See Paragraph [0004] of the specification.)

Regarding Claim 10: The cooking appliance further comprising a return element disposed between the door and the housing, wherein the return element is in force-transmitting connection with the door and the housing and is configured to aid the return of the door from the predetermined open position to the closed position.

(A hinge lever 33 connected to the oven door 7 is connected to a spring 35 which is secured to the body by bracket 36. This spring helps urge the door back to a closed position. See Column 4, Lines 43-50)

Regarding Claim 11: The cooking appliance further comprising at least one of a spring device and a damping device mounted on the rod and configured to retard a movement of the door from the closed position to the predetermined open position. **(A spring 52 is mounted on the push rod center section 53 shown in Fig 2. This spring is capable of retarding the movement of the door from the closed to open position. See Column 5, Line 13. There is also a buffer tip 112 shown in figure 7 for the same function which can be used with the spring 52)**

Regarding Claim 12: The cooking appliance further comprising at least one of a spring device and a damping device mounted on the rod and configured to retard a movement of the door from the predetermined open position to the closed position. **(A spring 52 is mounted on the push rod center section 53 shown in Fig 2. This spring is capable of retarding the movement of the door from the open to closed position. See Column 5, Line 13. There is also a buffer tip 112 shown in figure 7 for the same function which can be used with the spring 52)**

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walkoe as modified by Lile in further view of Berger et al (US 2003/0010221).

The teachings of Walkoe as modified by Lile have been discussed above.

Walkoe as modified by Lile fails to teach:

Regarding Claim 8: The cooking appliance as recited in claim 7, wherein the cooking appliance is a steam cooking appliance.

Berger et al teaches:

Regarding Claim 8: a steam cooking apparatus (See Paragraph [0002], Line 1)

In view of Berger et al's teachings it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Walkoe, the cooking

appliance as a steam cooking appliance since, Berger et al teaches a steam cooking apparatus for energy savings and a uniform temperature distribution in the entire cooking chamber.

Response to Amendment

8. The amendment filed 12/30/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The first and second conditions.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

9. Applicant's arguments filed 12/30/2009 have been fully considered but they are not persuasive.

In regards to applicant's arguments on page 5 of the reply, Walkoe does disclose the door is opened in response to time this is a first condition. The door closing when the circuit is broken by the bimetallic switch is a different second condition. Lile discloses the voltage is different the opening (first) and closing (second) signals are different. The differing voltages are different conditions since the opening and closing conditions are not the same.

10. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN JENNISON whose telephone number is (571)270-5930. The examiner can normally be reached on M-Th 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN JENNISON/
Examiner, Art Unit 3742

4/12/2010

/TU B HOANG/

Supervisory Patent Examiner, Art Unit 3742